



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,077	10/26/2000	Hideyuki Kimura	107714	1563
25944 7590 10/28/2009 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
PATTERSON, MARC A				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
10/28/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/674,077

Applicant(s)

KIMURA ET AL.

Examiner

MARC A. PATTERSON

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 12-14, 22, 23 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-14, 22, 23 and 26-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

NEW REJECTIONS

Claim Rejections – 35 USC § 102(b)

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 22, 26, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Brettell et al. (U.S. Patent No. 5,228,186).

With regard to Claims 1 and 22, Brettell et al disclose a body which is cylindrical (column 4, lines 65- 66) and therefore has a sidewall portion having an inner surface and an outer surface and an upper opening, and comprises a sheet shaped insert between a core and a cavity of a mold having an upper edge and lower edge (shell; column 5, lines 34 - 36); resin is injected into the space between the core and the cavity and is unified with the insert, allowing the insert to be bonded to the outer side of the wall of the body (column 4, lines 13 - 17), therefore bonded to the outer surface of the body; the body is therefore insertion molded; an injection gate mark is formed inwardly apart from the upper end of the insert in an axial direction and at a position corresponding to a position on the inner surface that is covered by the insert (the gates, which are runners, produce marks, that are stops; column 5, lines 58 - 63; Figure 3); Brettell et al disclose an upper edge and lower edge, which are the upper and lower edge of the contact part '9' in Figure 2, which define the length of the sheet – shaped insert because the upper and lower edge are a defined, finite distance from the upper opening of the insert and the end of the insert

opposite to the upper opening; the upper edge is below the upper opening of the cylindrical molded body as shown in Figure 2.

With regard to Claim 26, because resin is injected into the space between the core and the cavity and is unified with the insert, the insert is bonded to an entire surface of the outer surface of the sidewall portion, excluding a mouth portion of the cylindrical molded body.

With regard to Claims 28 and 30, the claimed aspect of the article being made by a method comprising fitting, attaching and holding the insert along the inner surface of the outer molding unit in the molding cavity is directed to a product - by - process limitation and is therefore given little patentable weight.

Claim Rejections – 35 USC § 103(a)

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brettell et al. (U.S. Patent No. 5,228,186).

Brettell et al disclose a cylindrical insert as discussed above. With regard to Claim 2, Brettell et al fail to disclose a gap on the outer surface positioned between opposed ends of the insert and not covered by the insert. However, it would have been an obvious matter of design choice to have provided for a gap in the insert of Brettell et al, since such a modification would

have involved a mere change in shape. A change in shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

5. Claims 3 - 6, 12 - 14, 23, 27, 29 and 31 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brettell et al. (U.S. Patent No. 5,228,186) in view of Suzuki et al (Japanese Patent No. 6246777).

Brettell et al disclose an insertion and injection molded article comprising an insert and injected resin as discussed above. The mold comprises a mold cavity, therefore an outer mold unit, and core, as discussed above, therefore a core shaped to be inserted and fitted into the outer mold unit, and a cavity between the outer mold unit and the core; the core also comprises an injection gate opening that is a runner, as discussed above; the insert is placed between the core and cavity, as discussed above, and is therefore fitted attached and held along the inner surface, and resin is injected toward the molded body inner surface; the insert is also therefore pushed onto the inner surface with the resin. With regard to Claims 3 - 4 and 23, Brettell et al fail to disclose a core which is a pull - out mold unit and a resin which is cured following injection.

Suzuki et al teach the use of a mold unit which is a pull - out mold unit (pulled out of the space; paragraph 0025, English translation) for molding, for the purpose of molding a hollow article (paragraph 0004, English translation). One of ordinary skill in the art would therefore have recognized the advantage of providing for the pull - out mold unit of Suzuki et al in Brettell et al, which comprises molding, depending on the desired use of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a pull - out mold unit, therefore a core

which is a pull - out mold unit, in Bretell et al in order to obtain a hollow article as taught by Suzuki et al.

With regard to Claims 5, 12, 27 and 29, a knock out pin is provided in the core disclosed by Suzuki et al (ejection pin; paragraph 0011, English translation), and the Suzuki et al further disclose pulling out the pull - out mold unit of the outer mold unit after insertion molding (paragraph 0025, English translation and cutting a connection between the cured resin inside an injection gate opening and a molded body by raising the knock, out pin (the ejection pin is raised, eliminating thermoplastics remaining between the core and runner, thus cutting the connection between molded body and the knock - out pin, and forming a mark left by the injection gate; paragraph 0011, English translation) and removing the body by pushing the bottom portion of the body (the fabricated compound container is taken out from the core by moving upwards the stripper plate with which its bottom portion is in contact (paragraph 0022, English translation; Figure 9).

With regard to Claims 6 and 13 - 14, as discussed above, the insert disclosed by Brettell et al is fitted, attached and held in a cylindrical shape along the inner surface of the outer mold unit; the mold unit is a pull - out mold unit as discussed above, and a contact frictional force is therefore applied by placing the insert in a cylindrical shape into the outer mold unit while the core of the injection molding mold is pulled out from the outer mold unit.

With regard to Claims 31 - 33, Brettell et al fail to disclose an injection gate opening that is taper - like thinned. However, it would have been an obvious matter of design choice to have provided for a tapered injection gate, since such a modification would have involved a mere

change in shape. A change in shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 1, 22, 26, 28 and 30 as being anticipated by Brettell et al. (U.S. Patent No. 5,228,186), 35 U.S.C. 103(a) rejection of Claim 2 as being unpatentable over Brettell et al. (U.S. Patent No. 5,228,186) and 35 U.S.C. 103(a) rejection of Claims 3 - 6, 12 - 14, 23, 27 and 29 as being unpatentable over Brettell et al. (U.S. Patent No. 5,228,186) in view of Suzuki et al (Japanese Patent No. 6246777), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 10 of the remarks dated Bretell et al do not disclose a sheet – shaped insert having an upper edge and a lower edge that define the length of the insert, and the upper edge below the upper opening of the cylindrical molded body.

However, as stated above, Brettell et al disclose a sheet – shaped insert having an upper edge and a lower edge that define the length of the insert, and the upper edge below the upper opening of the cylindrical molded body.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marc A Patterson/
Primary Examiner, Art Unit 1794